

Claims

[c1] What is claimed is:

1.A cooling structure for a projection apparatus, comprising:

a housing; and

at least one partition, installed in said housing to form a double-layer structure of a first zone and a second zone, and at least a first air inlet disposed at the lower part of said first zone, at least a second air inlet disposed between said first zone and said second zone and a turning angle existing between said first air inlet and said second air inlet.

[c2] 2.The cooling structure according to claim 1, further comprising a fan, installed in said second zone, used for drawing outside air into said housing through said first air inlet, and said air being entered said second zone through said second air inlet after being turned.

[c3] 3.The cooling structure according to claim 1, wherein a guide plate is installed at the exit of said second air inlet to guide airflow to elements needed to be cooled.

[c4] 4.The cooling structure according to claim 1, wherein a

plurality of sound sources is included in said second zone, said sound source is an optical engine or a fan.

- [c5] 5.The cooling structure according to claim 1, wherein an air outlet is disposed at said second zone and an air-guiding duct is installed in front of said air outlet.
- [c6] 6.The cooling structure according to claim 5, wherein a curved air flowing path is disposed in said air-guiding duct.
- [c7] 7.The cooling structure according to claim 6, wherein at least one baffle is installed in said air-guiding duct.
- [c8] 8.The cooling structure according to claim 1, wherein a duct formed by a plurality of printing circuit boards is disposed at the exit of said second air inlet, and heat elements are installed inside of said duct.
- [c9] 9.The cooling structure according to claim 1, wherein a filter is installed at said first air inlet.